fw

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,866	10/06/2003	Carl M. Panasik	TI-36572	3189

23494 7590 04/06/2006

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER	
AJIBADE AKONAI, OLUMIDE	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/679,866	**Applicant(s)** PANASIK ET AL.	
	Examiner Olumide T. Ajibade-Akonai	**Art Unit** 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 23 January 2006.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) 1-20 is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Response to Arguments

2. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 10, 12, 13, 15, 16 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by **Wesby et al 6,799,044 (hereinafter Wesby)**.

Regarding **claims 1 and 19**, Wesby discloses an information storage apparatus (base stations BTSs 1, 2 and 3, see fig. 1, col. 5, lines 6-10) and a method of storing information, comprising: an input (see figs. 1 and 6, col. 5, lines 13-17 and col. 15, lines 45-56) for coupling to an input information transfer path (see figs. 1 and 6, col. 5, lines 13-17 and col. 15, lines 45-56) that originates at a wireless mobile communication apparatus (mobile station terminal 9, see fig. 1, col. 5, lines 10-12), said input for, when coupled to said input information transfer path, receiving from the wireless mobile communication apparatus information, including identification of frequency channels available for transmitting information to and receiving information from the wireless mobile communication apparatus, (inherent, since the BSC receives identification of a cell c and all frequency channels f from the MS, indicating therefore that information was sent though the BTS to the BSC see col. 7, lines 16-45) for use in determining whether a desired wireless communication session with the wireless mobile communication apparatus will be established (handoff candidates are evaluated according to cochannel interference ratio, see col. 11, lines 46-64), an information storage apparatus coupled to said input for storing said information (inherent, since transceiver of the base station changes the frequency on every time slot, thereby requiring some processor with memory is required in the base station to accomplish such functions, see col. 6, lines 39-45), an output (see figs. 1 and 6, col. 5, lines 13-17 and col. 15, lines 45-56) for coupling to an output information transfer path (see figs. 1 and 6, col. 5, lines 13-17 and col. 15, lines 45-56) that extends to a further wireless communication apparatus (base station controller 7, see fig. 1, col. 5, lines 14-15), said information storage apparatus coupled to said output for providing said information to said output (see figs. 1 and 6, col. 5, lines 13-17 and col. 15, lines 45-56), and said output for, when selectively coupled to said output information transfer path, providing said information to the further wireless communication apparatus (BSC receives identification of a cell c and all frequency channels f from the MS see col. 7, lines 16-45) for use by the further wireless communication apparatus in determining whether the desired communication session will be established (handoff candidates are evaluated according to cochannel interference ratio, see col. 11, lines 46-64).

Regarding **claim 2**, as applied to as applied to claim 1, Chang further discloses wherein the further wireless communication apparatus is a fixed-site wireless communication apparatus (base station controller 7, see fig. 1, col. 5, lines 14-15).

Regarding **claim 3**, as applied to claim 2, Chang further discloses wherein said desired communication session involves the further wireless communication apparatus (base station controller 7, see fig. 1, col. 5, lines 6-15).

Regarding **claim 4**, as applied to 1, Chang further discloses wherein said desired communication session involves the further wireless communication apparatus (base station controller 7, see fig. 1, col. 5, lines 6-15).

Regarding **claim 10**, as applied to claim 1, Chang further discloses wherein the input information transfer path traverses the further wireless communication apparatus (inherent, since the BSC receives identification of a cell c and all frequency channels f from the MS, indicating therefore that information was sent though the BTS to the BSC see col. 7, lines 16-45).

Regarding **claim 12**, as applied to claim 10, Chang further discloses wherein the output information transfer path terminates at the further wireless communication apparatus (base station controller 7, see fig. 1, col. 5, lines 6-15).

Regarding **claim 13**, as applied to claim 1, Chang further discloses wherein the output information transfer path terminates at the further wireless communication apparatus (base station controller 7, see fig. 1, col. 5, lines 6-15).

Regarding **claim 15**, as applied to claim 1, Chang further discloses wherein the said information is indicative of a location of the wireless communication apparatus (BSC receives identification of a cell c and all frequency channels f from the MS see col. 7, lines 16-45).

Regarding **claim 16**, as applied to claim 1, Chang further discloses wherein said information (BSC receives identification of a cell c and all frequency channels f from the MS see col. 7, lines 16-45) is indicative of the channel conditions at the wireless mobile communication apparatus (see col. 7, lines 16-45).

Regarding **claim 18**, as applied to claim 1, Chang further discloses wherein said information (BSC receives identification of a cell c and all frequency channels f from the MS see col. 7, lines 16-45) is indicative of operational capabilities of the wireless mobile communication device (see col. 7, lines 16-45).

Regarding **claim 20**, Wesby discloses a method of storing information, comprising the steps of: receiving from a wireless mobile communication apparatus (mobile station terminal 9, see fig. 1, col. 5, lines 10-12) information, including identification of frequency channels available for transmitting information to and receiving information from the wireless mobile communication apparatus (inherent, since the BSC receives identification of a cell c and all frequency channels f from the MS, indicating therefore that information was sent though the BTS to the BSC see col. 7, lines 16-45), for use in determining whether a desired wireless communication session with the wireless mobile communication apparatus will be established (handoff candidates are evaluated according to cochannel interference ratio, see col. 11, lines

46-64); storing said information (inherent, since transceiver of the base station changes the frequency on every time slot, thereby requiring some processor with memory is required in the base station to accomplish such functions, see col. 6, lines 39-45); and making said stored information available to access by another wireless communication apparatus (base station controller 7, see fig. 1, col. 5, lines 14-15) for use by the another wireless communication apparatus in determining whether a desired communication session will be established (BSC receives identification of a cell c and all frequency channels f from the MS see col. 7, lines 16-45).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5-9, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wesby et al 6,799,044 (hereinafter Wesby)** in view of **Hukkanen (20040105428)**.

Regarding **claim 5**, as applied to claim 1, Wesby discloses the claimed invention except wherein the input information transfer path includes part of the data network.

In the same field of endeavor, Hukkanen teaches wherein the output information transfer path (call containing identity code of the calling device is sent through from the terminal DTA and the internet 210, see fig. 2, p. 3, [0023]) includes part of the data network (internet 210, see fig. 2, p. 3, [0023]).

It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Hukkanen into the system of Wesby for the benefit of establishing and maintaining a connection between communication devices via a data network.

Regarding **claim 6**, as applied to claim 5, the combination of Wesby and Hukkanen disclose the claimed invention.

Hukkanen further teaches wherein the output information transfer path (server 220 sends to terminal DTB through the internet 210 a call containing the identity code of the calling device, see fig. 2, p.3, [0023]) includes part of the data network (internet 210, see p.3, [0023]).

It would therefore have been obvious to one of ordinary skill in the art to further modify the combination of Hukkanen into the system of Wesby for the benefit of establishing and maintaining a connection between communication devices via a data network.

Regarding **claim 7**, as applied to claim 6, the combination of Wesby and Hukkanen disclose the claimed invention.

Hukkanen further teaches wherein the data network is a public data network (internet 210, see p.3, [0023]).

It would therefore have been obvious to one of ordinary skill in the art to further modify the combination of Hukkanen into the system of Wesby for the benefit of establishing and maintaining a connection between communication devices via a data network.

Regarding **claim 8**, as applied to claim 7, the combination of Wesby and Hukkanen disclose the claimed invention.

Hukkanen further discloses wherein the public data network includes the internet (internet 210, see p.3, [0023]).

It would therefore have been obvious to one of ordinary skill in the art to further modify the combination of Hukkanen into the system of Wesby for the benefit of establishing and maintaining a connection between communication devices via a data network.

Regarding **claim 9**, as applied to claim 1, Wesby discloses the claimed invention except wherein the output information transfer path includes part of a data network.

Hukkanen further teaches wherein the output information transfer path (server 220 sends to terminal DTB through the internet 210 a call containing the identity code of the calling device, see fig. 2, p.3, [0023]) includes part of the data network (internet 210, see p.3, [0023]).

It would therefore have been obvious to one of ordinary skill in the art to further modify the combination of Hukkanen into the system of Wesby for the benefit of establishing and maintaining a connection between communication devices via a data network..

Regarding **claim 11**, as applied to claim 10, Wesby discloses the claimed invention except wherein the input information transfer path includes part of a data network coupled to the further wireless communication apparatus.

Hukkanen further discloses except wherein the input information transfer path (call containing identity code of the calling device is sent through from the terminal DTA and the internet 210, see fig. 2, p. 3, [0023]) includes part of a data network (internet 210, see p.3, [0023]) coupled to the further wireless communication apparatus (server 220 sends to terminal DTB through the internet 210 a call containing the identity code of the calling device, see fig. 2, p.3, [0023]).

It would therefore have been obvious to one of ordinary skill in the art to further modify the combination of Hukkanen into the system of Wesby for the benefit of establishing and maintaining a connection between communication devices via a data network.

Regarding **claim 14**, as applied to claim 13, Wesby discloses the claimed invention except wherein the output information transfer path includes part of a data network coupled to the further wireless communication apparatus.

Hukkanen further teaches wherein the output information transfer path (server 220 sends to terminal DTB through the internet 210 a call containing the identity code of the calling device, see fig. 2, p.3, [0023]) includes part of a data network (internet 210, see p.3, [0023]) coupled to the further wireless communication apparatus (terminal DTB, see fig. 2, p.3, [0022]).

It would therefore have been obvious to one of ordinary skill in the art to further modify the combination of Hukkanen into the system of Wesby for the benefit of establishing and maintaining a connection between communication devices via a data network.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wesby et al 6,799,044 (hereinafter Wesby)** in view of **Kil (20010046855)**.

Regarding **claim 17**, as applied to claim 1, Wesby discloses the claimed invention except wherein said information is indicative of wireless communication resource use in a previous wireless communication session involving the wireless mobile communication apparatus.

In the same field of endeavor, Kil teaches wherein said information (power related information, see fig. 2, p.3, [0031]) is indicative of wireless communication resource use (power level of the mobile station, see p.3, [0032]) in a previous wireless communication session involving the wireless mobile communication apparatus (the base station receives power related information which is used to determine the power level of the mobile station, and the power level of the mobile station is used to determine if the station has seceded the cell, see fig. 2, p.3, [0031]-[0032]).

It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Kil into the system of Wesby for the benefit of providing a method for indicating that the subscriber is outside its service area.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Heller et al (20020183089) discloses a non-intrusive detection of enhanced capabilities at existing cellsites in a wireless data communication system.

Quensel et al (6,473,614) discloses a method and means for determining a handover in a radio communication system.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olumide T. Ajibade-Akonai whose telephone number is 571-272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OA

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER